

# > 1<sup>st</sup> Space Investment Forum

## Catalogue of companies

Andalusia, December 2<sup>nd</sup> 2021  
virtual event  
[www.ceseand.net](http://www.ceseand.net)

The role played by SMEs in the European space sector is growing in importance. In this context, the Enterprise Europe Network is striving to encourage and support SMEs and start-ups in their journey of accessing finance resources in Europe and beyond.

**SPACE INVESTMENT FORUM 2021** aims to bridge space companies with international investors during an intense and effective virtual networking event.

For the **SPACE INVESTMENT FORUM 2021**, the Agency of Innovation and Development of Andalusia, coordinator of the Andalusian node of the Enterprise Europe Network, is joining forces with EBAN - The European Trade Association for Business Angels, Seed Funds and Early Stage Market Players.

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# Solar MEMS Technologies SL

Sun sensor supplier for the space market and other high technology industries



Sevilla



15



2009



solar-mems.com



## PROBLEM AND SOLUTION

With the Newspace revolution and the miniaturization of the satellite technology, the space market needs miniaturized, more accurate and reliable ADCS solutions. Solar MEMS offers a wide portfolio of miniaturized sun sensors and other devices for ADCS with high accuracy, low power, high quality and low cost to satisfy the current market demands.



## MARKET

With more than 150 satellite constellations announced and around 6500 satellites planned for the next 5 years, newspace market is expected to grow from 350M\$ to 3B\$ in the next 20 years. Most of these satellites will require accurate and reliable ADCS systems to offer earth observation/remote sensing and telecommunication services among others.



## BUSINESS MODEL

Our business model consists of offering sun sensors and other ADCS sensors, not only to companies involved in the space sector, but to the entire community of developers of new products and technologies in the renewable energy, UAV, automotive, defence and home automation markets. Solar MEMS also offers customized solutions and engineering services



## COMPETITION

In the space market, we have no competitors in Spain but mainly in Netherlands (Bradford Space, Hyperion Technologies and LENS R&D), South Africa (NewSpace Systems and CubeSpace) and USA (Adcole Space and SpaceMicro). There are around 20 competitors all over the world including countries like Germany, Denmark, China and India as well.



## MILESTONES / NEW STEPS

With customers in more than 50 countries, we have delivered >2000 flight units for space companies, agencies, and universities worldwide and have >1000 sun sensors in orbit since 2009. We are the sun sensor supplier of OneWeb constellation (>1300 units). For this program our company industrialized the assembly line for high-volume production rates.



## FOUNDING TEAM



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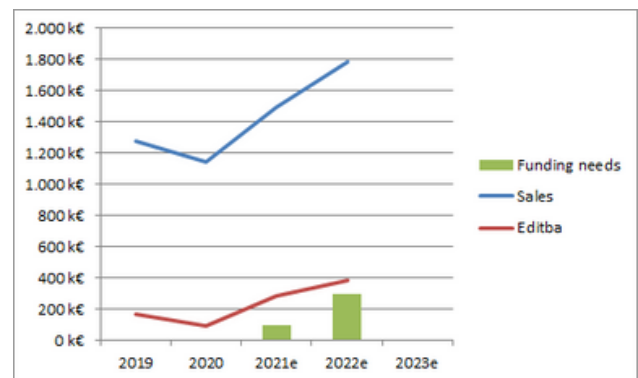


## INVESTMENT NEEDS AND DESTINATION

2M€ in the next 4 years for new products development (microthruster, advanced digital sun sensor and others) and to increase current facilities and manufacturing capabilities for sun sensor, star tracker and EGSE production.



## FINANCIAL PROJECTIONS AND FUNDING NEEDS



External capital raised  
-k€



Capital invested by the team  
118k€



Burning rate  
N/A



## ASK THE ENTREPRENEUR

**What made you set up the company? What previous relationship did you have with your potential market?**

As a spin-off from the MEMS Dept. of the Univ. of Seville, we detected the opportunity to make smaller sun sensors and develop a competitive product in a market where miniaturization started to be key

**What is the company's most significant risk and how will you tackle it?**

Increase of competition through the development of new technologies. We need to keep developing innovative products and improve the existing ones to fulfil the demands of future satellite technologies

**How do you see the company in 5 years'time?**

World leader of ADCS sensor solutions for small and medium sized satellites

# Wegaw

Remote sensing satellite data processing with machine learning for renewable energy production optimization



## PROBLEM AND SOLUTION

Energy markets are suffering from future contract record breaking prices and spot market volatility, heavily influenced by the lack of understanding of future renewable energy production. At Wegaw we combine satellite data with machine learning to forecast future renewable energy production producing 10% additional energy and 5% price efficiency



## MARKET

Starting from a USD 14.72B Serviceable Addressable Market, which represents Renewable energy forecasting market. Wegaw is aiming to a subset of USD 126M which represents satellite data driven energy forecasting capabilities for Hydro, Wind, Solar and Ocean power.



## BUSINESS MODEL

Wegaw charges a subscription of EUR 5k - EUR 20k, per renewable energy asset per year. The annual subscription will include live data stream extracted from satellite data per renewable energy asset (hydropower, wind farm or solar farms), visualized in a dashboard.



## COMPETITION

Companies directly competing with Wegaw in the hydropower space:

- Think Outside: Norwegian startup in hydropower space through drone monitoring
- WaterJade: Italian Water forecasting company with satellite data
- SnowSense: German water forecasting company through GPS enabled hardware



## MILESTONES / NEW STEPS

1. Commercial traction with 10 clients in Spain, Switzerland, Andorra and New Zealand.
2. Seed Round of USD 1M raised.
3. European Space Agency contractor and 2 EU strategic partnerships.
4. Road to USD 1M revenue in 2022, already USD 100k booked.



Málaga



13



2016



wegaw.com



## FOUNDING TEAM



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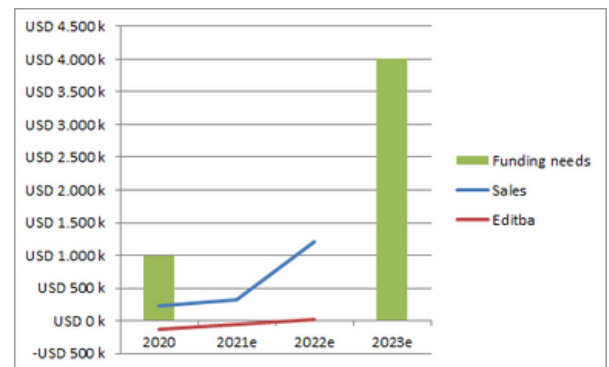
## INVESTMENT NEEDS AND DESTINATION

### USD 4M Series A

- Internationalization Latam & North America
- Off-shore wind product dev and piloting
- Hydropower sales scale-up
- Go-to-Market partnership development



## FINANCIAL PROJECTIONS AND FUNDING NEEDS



External capital raised  
USD 1.3M



Capital invested by the team  
USD 20k



Burning rate  
USD 50k



## ASK THE ENTREPRENEUR

**What made you set up the company? What previous relationship did you have with your potential market?**

We build a snow monitoring product from satellite data that raised a lot of interest from the hydropower industry, for snowmelt monitoring to optimize hydropower production.

**What is the company's most significant risk and how will you tackle it?**

Lack of momentum and capitalization in current client traction.

**How do you see the company in 5 years'time?**

100 employee company operating worldwide, over the 20M revenue market, looking for M&A opportunities



FIPAS

Forest Fire Prediction Alarm System



Málaga



13



2003



fipas.nassat.space



### PROBLEM AND SOLUTION

Forest fires are growing in magnitude & scale, and currently there was no way to prevent them until now. Nassat offers FIPAS (Forest Fire Prediction Alarm System) providing fire risk levels areas, also offers detailed information of the area and what causes the risk. With real time info, authorities can focus these variables, minimizing the risk.



### MARKET

The market available for this product are all companies or authorities that manage forest areas, national parks, or even large private areas. These are firefighters, environmental companies, governments, universities and private companies. Actually our project focus on Europe, but we are willing to grow to every other country.



### BUSINESS MODEL

We offer subscription service. Customers have access to real time detailed information, alerts and notifications through web platform. The monthly/annual cost depends on the size of the area to monitor. It is personalized subscription service. Commercialization is scheduled for 2023. Actually we have several formal request of interested customers.



### COMPETITION

There are few companies/projects that offer risk map and information of fire areas, but none of these offer detailed area predictions or updated real time information. We do.



### MILESTONES / NEW STEPS

FIPAS index. Prediction tool that reports the risk of fire and provides detailed information on the causes that cause it.



### FOUNDING TEAM



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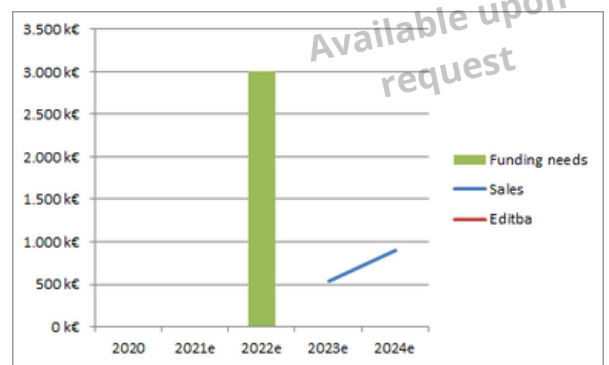


### INVESTMENT NEEDS AND DESTINATION

3M€



### FINANCIAL PROJECTIONS AND FUNDING NEEDS



External capital raised  
250k€



Capital invested by the team  
1M€



Burning rate  
-k€



### ASK THE ENTREPRENEUR

**What made you set up the company? What previous relationship did you have with your potential market?**

Nassat works with environmental companies, providing connectivity, since 2003. We know their resources and needs. We started this project to offer a solution that meets all their needs.

**What is the company's most significant risk and how will you tackle it?**

The most significant risks are the difficulty of the project it self and the investment required. We tackle the difficulty with expert team members, and the investment with the collaboration of EU.

**How do you see the company in 5 years'time?**

Nassat leading the market and growing in other areas adapting to market needs like we do since 2003.



# Agrow Analytics

Agrow is a platform to manage real time and future recommendations about water availability and its effect on crops.

# AGROW

ANALYTICS



## PROBLEM AND SOLUTION

70% of fresh water is used in agriculture, where the population will grow by 2050 until 10 billion what it means food production will double.

Our solution is a tool that allows make better decisions with real-time and predictive information about irrigation, you will be provided with information in order to know how, when and where to irrigate.



## MARKET

- Our target market are Spain cooperatives and Private companies working in farming as primary producers.
- Our TAM is € 3.7 Billion: precision farming worldwide size
- Our SAM is € 210 Millions: precision farming in fruits and vegetables in Spain
- Our SOM estimation in 3 years is € 3 Million



## BUSINESS MODEL

Our business model is a SaaS, B2B. A customized plan according to the necessities of the company, the price per hectare is €3/month (billed annually) and our ideal customer profile has around 150 and 200 hectares. Additionally, we have a pro plan that includes 10 hectare and the pricing is €25 per month.



## COMPETITION

We identified as main competitors:

- Manna Irrigation
- Kilimo
- Vandersat
- AgroSmart
- Irriwatch



## MILESTONES / NEW STEPS

Agrow was founded officially in March 2021, we have been working with 9 pilot clients from March.

In August we launched our beta version to the market.

Currently we have started our firsts paid clients, reaching € 8000 ARR.



Málaga & Valencia



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03/2021



agrowanalytics.com



## FOUNDING TEAM



Antonella Maggioni

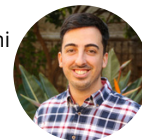
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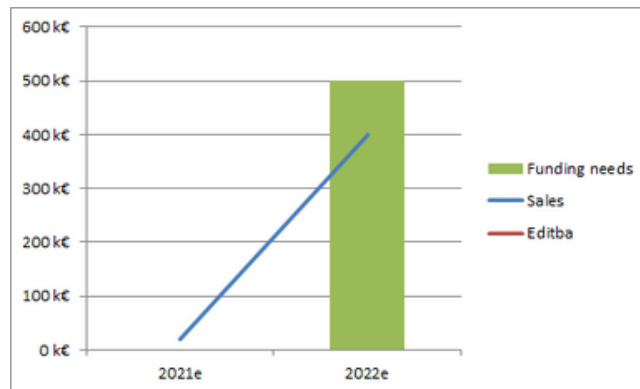
## INVESTMENT NEEDS AND DESTINATION

500k€

45% Software development 35% Sales & Marketing 20% G&A



## FINANCIAL PROJECTIONS AND FUNDING NEEDS



External capital raised  
175k€



Capital invested by the team  
6 months of free work



Burning rate  
10 k€

## What is the company's most significant risk and how will you tackle it?

Our main risk is we are first time entrepreneurs so we are learning along the way, we are tackling surrounding ourselves with experienced people we can learn from.

## How do you see the company in 5 years'time?

As one of the best solutions as water recommendation tool in farming, smart city and golf courses.



## ASK THE ENTREPRENEUR

### What made you set up the company? What previous relationship did you have with your potential market?

The founders met in Demium, they were very determined to build something impactful in agriculture, from the combination of environmental science, finance, and AI Agrow was born.

# FOSSA Systems S.L.

We democratize access to low-power IoT communications anywhere globally, creating an ecosystem that integrates space solutions through our picosatellites; and terrestrial solutions through our nodes and Ground Stations.



# FOSSA



## PROBLEM AND SOLUTION

There is a growing demand for connectivity for IoT devices. Today, most of the Globe does not have access to mobile coverage (3G, 4G, GSM, etc.). Ground solutions have coverage limitations, and space solutions are often expensive. That's where FOSSA comes in, integrating terrestrial and space solutions to provide low-power IoT connectivity services.



## MARKET

The IoT connectivity market is expected to reach, by 2030, more than 25 billion connected IoT devices, driving to a turnover of more than 1 trillion USD for connectivity services. Around 25% of these devices will be used in different Industries such as AgriTech, Logistics, Energy or Smart Mobility and Connected Vehicles.



## BUSINESS MODEL

Our primary business model is based on a SaaS model. Infrastructure capacity is sold (through the Picosatellite Constellation) to provide the IoT connectivity services through a monthly subscription that varies depending on the number of packages and periodicity required. The secondary business model is based on developing dedicated constellations.



## COMPETITION

Our main competitors are Swarm, Astrocast, Iridium or Inmarsat. Regardless that our solutions translate into a lower cost for the end-user, our service's main advantage lies in the use of low-power transmissions, allowing us to reduce the size of the antennas on the ground (ideal for asset monitoring).



## MILESTONES / NEW STEPS

We started in July 2020 and had organic growth until March 21. We closed our seed series, raising € 765k in April 21. We are currently 16 people in the team and in January 2022 we will launch the first 6 satellites of a constellation of 80 for which we already have the licenses granted. We are seeking a series-A round to deploy the constellation.



Madrid



16



07/2020



fossa.systems



## FOUNDING TEAM



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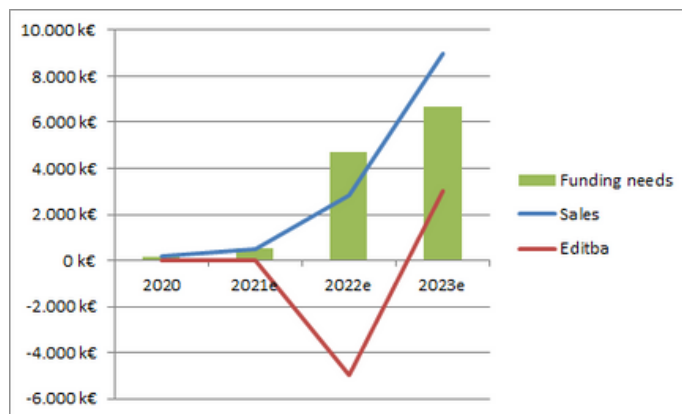


## INVESTMENT NEEDS AND DESTINATION

10M€ to deploy the whole infrastructure for IoT connectivity in 2 years. 5M€ in Picosatellite Manufacturing, Development and Operations. 3M€ investment in workforce and key personnel. 2M€ investment in facilities.



## FINANCIAL PROJECTIONS AND FUNDING NEEDS



External capital raised  
765k€



Capital invested by the team  
3k€



Burning rate  
70k€

## What is the company's most significant risk and how will you tackle it?

The bigger risk is technology failure once orbit is reached. For this reason, all our developments are subjected to all kinds of environmental tests and rigorous design processes to minimize risk.

## How do you see the company in 5 years'time?

Being one of the global leaders in low-power IoT communications via satellite.



## ASK THE ENTREPRENEUR

### What made you set up the company? What previous relationship did you have with your potential market?

The success of the FOSSASat-1 mission began to attract customers interested in our technology, which led us to discover the incipient demand for space-based IoT connectivity services.

# NOMO

NOMO offers an inexpensive and intuitive SaaS to farmers, agronomists and companies in the agricultural sector, for crop monitoring and smart farm management through satellite.



Málaga



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12/2020



nomoagron.com



## PROBLEM AND SOLUTION

In Spain, only 2% of farmers have complete agricultural training, 81% are over 40 years old and there is low knowledge and adoption of technology. They need useful and easy-to-use technological tools on their farms to reduce the consumption of water, pesticides and fertilizers. Getting to be more productive, efficient and profitable.



## MARKET

Our potential clients are small producers. They represent more than 80% of the total cultivated land in Spain. We focus our efforts on agricultural cooperatives with producers who have at least 2 hectares. This buyer persona represents more than seven and a half million hectares just in Spain, which is a huge market size.



## BUSINESS MODEL

A SaaS that helps farmers and agronomists increase their yields and reduce risks by making data-driven decisions. The service is a monthly subscription per hectare with annual discounts.



## COMPETITION

Our differentiation is the HOW we offer the service against the competition. We are a user-friendly platform, more intuitive and simple than our competitors. Adapted to Cooperatives and small producers. We only give relevant information for our users, configured in less than 5 minutes, guides and video tutorials, personalized after-sales service.



## MILESTONES / NEW STEPS

- Strengthen collaborations with companies that supply: digital field notebooks, 4.0 irrigation systems, machinery and environmental sensorization.
- Finish API-REST for integration with other solutions on the market.
- Publish NOMO 2.0
- Financing through CDTI NEOTEC.
- Creation of infrastructure for continuous integration of algorithms.



## FOUNDING TEAM



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User Experience**



Diego Hernández  
**CTO. Dev. Integration &  
continuous deployment**



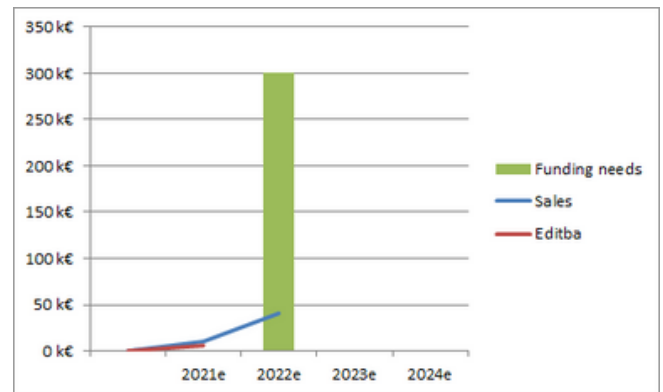
## INVESTMENT NEEDS AND DESTINATION

300k €

- Costing two years salaries of entrepreneurs.
- Outsourcing some external development services for the front-end.
- Start different lines of R&D projects such as CDTI Neotec, and other European incentive lines.



## FINANCIAL PROJECTIONS AND FUNDING NEEDS



**External capital raised**  
0€. Currently in an investment round of 300k USD



**Capital invested by the team**  
10 k€



**Burning rate**  
300€



## ASK THE ENTREPRENEUR

**What made you set up the company? What previous relationship did you have with your potential market?**

Our goal is to democratize smart agriculture. Through another joint venture with three partners, we offer consulting services to the agricultural sector with the use of drones and satellite images.

**What is the company's most significant risk and how will you tackle it?**

A slow sector for business decision making and the use of information technology. Marketing and sale with European financing funds for services and development of agriculture 4.0.

**How do you see the company in 5 years'time?**

Intuitive information HUB to complement decision-making in the field of cooperatives and farmers.



# Cartometrics



## Detection of fraud in water consumption.



### PROBLEM AND SOLUTION

Water companies lose millions of euros a year due to fraud committed by their customers and the large investment they must make to monitor them. At Cartometrics we have developed a platform that is supported by an algorithm that detects possible fraud.



### MARKET

TAM: Worldwide (13,000 corporations and large companies).

€ 13,000 \* € 15,000 = € 195,000,000,000 / year

SAM: Companies from mediterranean areas (1,200 corporations and large companies).

1,200 \* € 15,000 = € 18,000,000 / year

SOM: Local areas (163 corporations and large companies).

163 \* € 15,000 = € 2,445,000 / year



### BUSINESS MODEL

- First year: € 15,000 / year 1000 homes (minimum 800 homes) by municipality 5 km<sup>2</sup>

-The following years for same municipality and same homes: € 4,000 / year



### COMPETITION

Currently there are no direct competition dedicated exclusively to this task. There are some water companies that have created internal teams or approaches to carry out the task, but without much success due to the lack of superiority of the technologies that we combine (satellite images, data science and geospatial).



### MILESTONES / NEW STEPS

- 2021 Q4: Pilot project for Aquona S.A. and Gestagua (achieved). Pilot project for EMASA(in process).
- 2022 Q1: Expand sales team and development. Search for clients in SOM.
- Agreement with satellite data providers to lower prices by volume.
- Q2, Q3, Q4: Search for clients in SAM. Expand data science and fullstack team. native sales team for TAM..



### ASK THE ENTREPRENEUR

**What made you set up the company? What previous relationship did you have with your potential market?**

Water management companies usually use GIS and therefore we hold many meetings with their technical staff, to detect needs that they have already established which GIS could not solve.



Málaga



6



2019



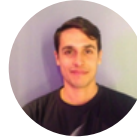
cartometrics.com



### FOUNDING TEAM



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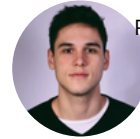
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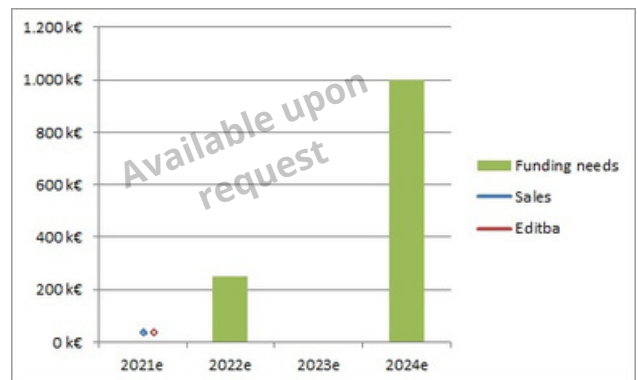
### INVESTMENT NEEDS AND DESTINATION

€ 250,000

- Sales team for SOM (2 people).
- Sales team for the TAM and SAM with native speakers (4 people).
- Expand development team (1 data scientist and 2 fullstack).
- For marketing and product development.



### FINANCIAL PROJECTIONS AND FUNDING NEEDS



External capital raised  
-k€



Capital invested by the team  
10k€



Burning rate  
€ 6,000 / month

**What is the company's most significant risk and how will you tackle it?**

We must be the first with an accessible product. The algorithms and partnerships we have will be our competitive advantage.

**How do you see the company in 5 years'time?**

Helping to detect fraud in different sectors like water, electricity and government.

# Sateliot

The unique satellite constellation connecting the 5G IoT devices of the world from space



## PROBLEM AND SOLUTION

Sateliot provides full coverage IoT connectivity in NB- IoT standard (4G/5G) based on a LEO constellation of Nano satellites working as cell towers from space. We work on a B2B model dealing directly with the Mobile Operators extending basically their coverage to where they are not present.



## MARKET

Until 2024, the number of cellular IoT subscribers is forecasted to grow at a compound annual growth rate (CAGR) of 21.6 percent to reach 4.15 billion at the end of the period.



## BUSINESS MODEL

Our go to market strategy is based on a unique approach. Seamless coverage extension for mobile operators allows Sateliot to establish a global presence.



## COMPETITION

Today there are several players on the machine-to-machine market addressing a very interesting market dominated by Orbcomm, Intelsat, Iridium, etc. We do not compete with them. Our service is addressed to the Massive IoT market based on Standard 5G



## MILESTONES / NEW STEPS

Commercial constellation 2023.



## FOUNDING TEAM



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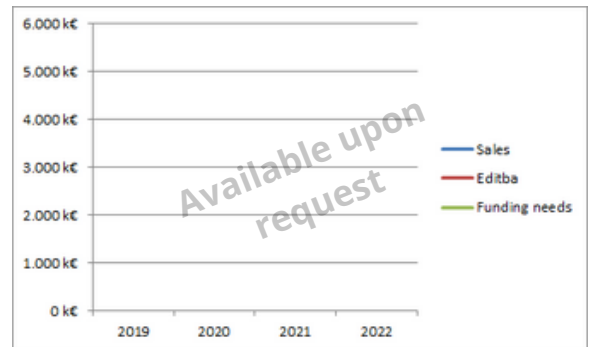


## INVESTMENT NEEDS AND DESTINATION

Closing series A



## FINANCIAL PROJECTIONS AND FUNDING NEEDS



External capital raised  
€



Capital invested by the team  
€



Burning rate  
€

Available upon request.



## ASK THE ENTREPRENEUR

**What made you set up the company? What previous relationship did you have with your potential market?**

My previous experience  
"0" on the telecom market

**What is the company's most significant risk and how will you tackle it?**

Talent attraction. With unique company proposition

**How do you see the company in 5 years'time?**

With sales over 1B and EBIT of 300M



innoplant.es  
greenmoonproject.com



## PROBLEM AND SOLUTION

Our project focuses on studying and supporting the question of how it will be possible to grow plants on the moon. We create solutions that merge planetary geology, plant biology and aerospace engineering to design the future spatial crops.



## MARKET

Interest of our know-how for top-level centers such as NASA and ESA, or private companies related to space tourism or life support for future astronauts.



## BUSINESS MODEL

Our business model focuses on creating a strong technological package that constitutes valuable know-how that is of interest to institutions such as NASA or ESA. Our development will be essential for private companies that work in lines related to space tourism and those aimed at giving life support to future astronauts.



## COMPETITION

Green Moon Project started as a university project in September 2016 to understand how crops will behave under lunar gravity conditions. One of the 15 projects preselected among 3,400 submissions to the Lab2Moon competition organised by Team Indus within the Google Lunar X Prize in 2017.



## MILESTONES / NEW STEPS

- Training of a first-rate scientific-technical team.
- Collaboration agreement with COSE (Center of Space Exploration) and the University of Chongqing (China).
- Development of a capsule design, a robotic moon germinator.
- Development of the first Spanish lunar regolith to be used for germination tests.



## FOUNDING TEAM



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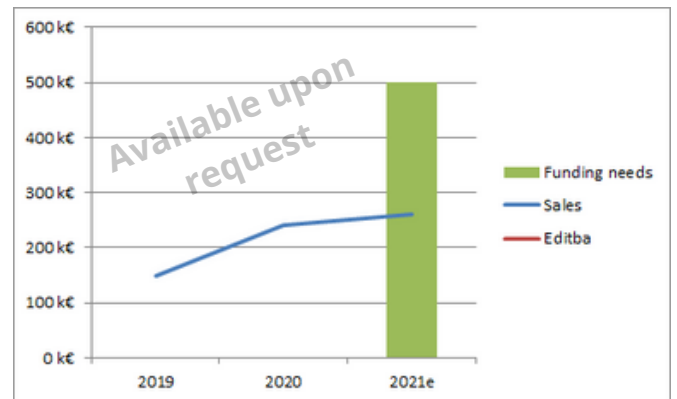


## INVESTMENT NEEDS AND DESTINATION

2.5M€ for the next 4 years for new prototypes development and manufacturing, facilities, salaries and equipment adquisition



## FINANCIAL PROJECTIONS AND FUNDING NEEDS



External capital raised  
-€



Capital invested by the team  
80k€



Burning rate  
-€

Available upon request.



## ASK THE ENTREPRENEUR

**What made you set up the company? What previous relationship did you have with your potential market?**

After working in the scientific sector and later in the business sector, we detected a market niche in the R&D service for companies in the agri-food sector.

**What is the company's most significant risk and how will you tackle it?**

The search for financing and the search for potential clients due to the long term target.

**How do you see the company in 5 years'time?**

Positioned as a key company in the development of the future agricultural space.

